The Value of Building a Real-World Evidence Center of Excellence

Streamlined solutions for data-driven discovery in life sciences

In the life sciences industry, many companies strategically employ real-world data (RWD) to generate real-world evidence (RWE) analyses. Leveraging high-quality data from real patient experiences helps researchers better understand disease progression, treatment effectiveness, and overall healthcare practice. The insights gained from one-time analyses often carry the potential to dramatically improve patient outcomes. However, individual RWD point in time studies, whilst valuable, do not provide the full value potential that is available from highly curated, refreshed disease-specific datasets. Most project-based work is limited to specific questions that companies are looking to answer, whereas those with full data access have the flexibility to unlock even more insights.

A more fruitful approach to fully leverage these advanced datasets involves establishing an RWE Center of Excellence (CoE). This integrated hub approach provides a foundational path to fully leverage diverse RWD datasets, enhancing the scope and value of insights gleaned. By centralizing RWE expertise and capabilities, a CoE enables organizations to scale their use of RWD and accelerate broad-scale RWE generation, enhancing a company's ability to meet clinician and patient needs in changing healthcare landscapes. Ultimately, establishing an RWE CoE enables an organization to capitalize on the full potential of RWE to help improve patient outcomes.

With an RWE CoE, organizations become more data-driven across the drug product lifecycle with a streamlined approach that allows for:

- Reduced risk from secure and compliance-ready cloud-based platform technology
- Lower overhead than traditional data procurement processes
- Higher satisfaction among end users due to seamless and secure data availability
- Increased return on investment from cross-utilization of data assets across multiple use cases
- Greater transparency, control, and traceability of data usage

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Building an RWE CoE from the ground up can be daunting, given the complex interplay of data management, regulatory compliance, and technical expertise. Working with third-party platforms and data partnerships can significantly mitigate these challenges. By leveraging external resources, organizations can substantially reduce overhead costs associated with data acquisition and management, while freeing internal resources to focus on the critical tasks of data analyses and interpretation. A strategic approach to building an RWE CoE helps companies accelerate and drive innovation, enhance patient care, and deliver on business goals.

Strategic Approach to **Building an RWE CoE**

STEP
1
Establish a Central Center of Excellence Organization

STEP
2
Leverage a Scalable Technology Platform

STEP
3
Access High-Quality Real-World Data Assets

Step One: Establish a Central Center of Excellence Organization

Establishing an RWE CoE begins with forming a robust team with the experience and know-how to pinpoint the necessary infrastructure and identify the right data partners. This team should typically be comprised of seasoned professionals who combine strategic perspectives with practical insights into data analytics, regulatory standards, and scalability requirements. Their collective experience and knowledge are crucial in shaping the RWE CoE's foundation.

This central management team will act as the driving force behind the RWE CoE, playing a pivotal role in defining its strategic direction and ensuring operational effectiveness. They are also tasked with ensuring that any business units with the potential to benefit from RWE findings are aware of the new technological capabilities offered by the CoE and learn how to access them. This team will create an environment for the RWE CoE to succeed by managing development and socializing capabilities. With their leadership, the organization will enjoy the power of RWE to deliver actionable insights that shape products and strategy.

Step Two: Leverage a Scalable Technology Platform

Robust

As organizations scale their use of RWD, the need for a robust, efficient, and scalable technology platform becomes critical. This platform will provide the technological backbone to manage, process, and analyze large volumes of data within their RWE CoE and across other business needs. The right platform aids in the seamless integration of disparate data sources, supports advanced data analytics applications, and provides the agility needed to adapt to evolving business needs and technological advancements.

Secure

When working with patient data and proprietary analyses, security is paramount. Today, companies can enjoy deep security without sacrificing usability by employing cloud-based platform solutions. Cloud infrastructure allows platforms to invest in next-generation security measures that protect against breaches and ensure regulatory compliance. Cloud-based platforms are also highly scalable and adaptable to a wide range of business needs.

"**Amazon Web Services (AWS)** enables businesses of all sizes to leverage powerful data tools in a way that is easy to scale and is protected by cutting-edge security technology. AWS Data Exchange helps companies take analyses to the next level by offering pre-developed third-party datasets for deep insights," says Anna Whitehouse, Head of Product, AWS Data Exchange.

Adaptable

To get the most out of an RWE CoE, it should accommodate multiple technology tools and high-quality datasets. Providers that offer a built-in marketplace enable an organization to select from a diverse range of analytical tools and data sources, enhancing the scope and depth of its RWE efforts. The right platform serves as a strategic enabler, expanding a company's analytical capabilities, improving its data access, and accelerating discovery.

Choosing a High-Quality RWD Partner

- ☑ Disease & Therapy Specific
- ☑ Trusted Data Source
- ☑ Longitudinal Multi-year Collection
- ☑ Regularly Updated
- ☑ Validated by Medical Experts & Peer-reviewed
- ☑ Leverages AI for Deeper Insights
- ☑ Secure & De-identified
- ☑ Accessible by Technology Platforms

Step Three: Access High-Quality Real-World Data Assets

High-quality RWD are the lifeblood of any RWE CoE. They provide the raw material from which actionable insights are derived and create the foundation for all RWE efforts. Robust RWD enables a holistic view of the patient journey, capturing the complexities and nuances of disease progression and treatment decisions. By delivering a deep and accurate understanding of this complex landscape, RWD can help organizations identify disease subtypes, enhance healthcare decision-making, and improve patient outcomes.

Obtaining high-quality RWD can be difficult for a company to do alone. Meaningful datasets must include large numbers of disease-specific and treatment-specific patients, ideally spread across a multitude of clinicians and collected over many years. This data must be expertly curated and de-identified to meet quality and patient privacy standards. Tools, such as artificial intelligence (AI), may be used to correctly categorize and label data points from complex, unstructured data sources (e.g., patient notes). Partnering with a third-party data provider can help organizations obtain the best RWD to meet the goals of their RWE CoE.

"By combining the power of AI with the expertise of medical professionals and data scientists, **Verana Health** has developed a solution for capturing scalable, high-quality, real-world patient data from electronic health records. Our datasets drive discovery by illuminating how clinicians and patients navigate disease journeys in real life," says Lawrence Whittle, President, Verana Health.

RWE CoE in Action

Boehringer Ingelheim is a pharmaceutical company that takes healthcare products from discovery to market. As a research-driven organization, the company constantly seeks new and better solutions to drive innovation and improve patients' lives. One of the company's goals was to embark on a mission to build an RWE CoE.

Boehringer Ingelheim's team was already familiar with AWS, a cloud-native platform that delivers business solutions across multiple needs and departments. AWS Data Exchange is a service that makes it easy for AWS customers to find, subscribe to, and use third-party data in the AWS Cloud. AWS Data Exchange offers over 3,500 high-quality, curated datasets from numerous industries.

AWS Data Exchange

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3,500K+
high-quality, curated datasets

Recently, AWS partnered with Verana Health, a leading provider of high-quality RWD, to offer Verana Health's Qdata®, a series of research-ready data modules, on AWS Data Exchange. Verana Health possesses exclusive partnerships with leading medical societies in ophthalmology, neurology, and urology, to collect and catalog electronic health record data, using AI tools to curate clinician notes into usable datasets. This process delivers insights from over 90 million de-identified patients across more than 20,000 clinicians, with longitudinal insights into patients' journeys.

Verana Health's Qdata®

Insights from
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Boehringer Ingelheim recognized the potential that Verana Health's Qdata have to accelerate its research in multiple diseases of interest. Verana Health and AWS partnered to offer Boehringer Ingelheim a 30-day proof-of-concept. It is vital to have time to explore the data as a proof-of-concept, or sample, to ensure the data meets the needs and is fit-for-purpose.

Thanks to AWS Data Exchange's ease of use, the Boehringer Ingelheim team was able to quickly access Verana Health's Qdata and recognize the immense value held in these robust datasets. The team has entered a multi-year agreement with AWS and Verana Health, and will now use AWS's powerful tools and Verana Health's high-quality RWD to power its RWE CoE and drive innovation that improves patient outcomes.

"Our partnership with Verana Health and AWS allows us to streamline our data acquisition and analyses approach while broadening the horizon of what we can discover. Accessing these comprehensive data modules, through AWS Data Exchange, opens new opportunities to make the most of patient data," says Paul Petraro, executive director, Global Head Real-World Evidence Analytic Center of Excellence at Boehringer Ingelheim Pharmaceuticals, Inc.

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Verana Health's proprietary data are now available on AWS Data Exchange. To learn more, visit: https://veranahealth.com/life-sciences